IN THE CLAIMS

Pursuant to 37 CFR §121(c), the claim listing, including the text of the claims, will serve to replace all prior versions of the claims, in the application.

Please amend claims 1 and 3 and cancel claim 4 without disclaiming its subject matter to read as follow:

1. (Currently Amended) A magnesium titanate implant, comprising:

an implant body containing titanium or a titanium alloy; and

a magnesium titanate oxide film formed on the surface of the said implant body by low voltage dielectric breakdown anodic oxidation of the surface of the implant body in a single or mixed solution containing magnesium, the magnesium titanate oxide film comprising an upper porous layer and a lower barrier layer ~~by low voltage dielectric breakdown anodic oxidation~~.

Claim 2. (Canceled)

3. (Currently Amended) The magnesium titanate implant as set forth in claim 1, wherein the magnesium titanate oxide film contains 6 to ~~26%~~ 26 weight % of titanium, 51 to ~~71%~~ 71 weight % of oxygen and 1.8 to ~~32%~~ 32 weight % of magnesium, as main ingredients, based on the total weight of the magnesium titanate oxide film.

4. (Canceled)

5. (Previously Presented) The magnesium titanate implant as set forth in claim 1, wherein the magnesium titanate oxide film has a thickness of 300 nm to 30 μm.

6. (Previously Presented) The magnesium titanate implant as set forth in claim 1, wherein the magnesium titanate oxide film has a thickness of 500 nm to 10 μm.

7. (Original) A process for preparing a magnesium titanate oxide film implant, comprising:

irradiating UV light on an implant body made of titanium or a titanium alloy in distilled water for more than 2 hours;

dipping the UV light-irradiated implant body in an electrolyte solution containing magnesium; and

coating a magnesium titanate oxide film on the dipped implant body by anodic oxidation at a voltage of 60 to 500V.

8. (Original) The process as set forth in claim 7, wherein the electrolyte solution is a single or mixed solution containing magnesium.

9. (Previously Presented) The process as set forth in claim 7, wherein the electrolyte solution has a concentration ranging from 0.01M to 1.0M.

10. (Previously Presented) The process as set forth in claim 7, wherein the electrolyte solution has a pH of 3.0 to 12.5.

11. (Previously Presented) The process as set forth in claim 7, wherein the current density for performing the anodic oxidation is within the range of 30 to 4000 mA/cm2.

12. (Previously Presented) The process as set forth in claim 8, wherein the electrolyte solution has a concentration ranging from 0.01M to 1.0M.

13. (Previously Presented) The process as set forth in claim 8, wherein the electrolyte solution has a pH of 3.0 to 12.5.

14. (Previously Presented) The process as set forth in claim 8, wherein the current density for performing the anodic oxidation is within the range of 30 to 4000 mA/cm2.

15. (Previously Presented) A process for preparing a magnesium titanate oxide film implant as set forth in claim 1, comprising:

irradiating UV light on the implant body made of titanium or a titanium alloy in distilled water for more than two hours;

dipping the UV light-irradiated implant body in an electrolyte solution containing magnesium; and

coating a magnesium titanate oxide film on the dipped implant body by anodic oxidation at a voltage of between 60V to 500V.

16. (Previously Presented) A process for preparing a magnesium titanate oxide film implant as set forth in claim 3, comprising:

irradiating UV light on the implant body made of titanium or a titanium alloy in distilled water for more than two hours;

dipping the UV light-irradiated implant body in an electrolyte solution containing magnesium; and

coating a magnesium titanate oxide film on the dipped implant body by anodic oxidation at a voltage of between 60V to 500V.

17. (Previously Presented) A process for preparing a magnesium titanate oxide film implant as set forth in claim 4, comprising:

irradiating UV light on the implant body made of titanium or a titanium alloy in distilled water for more than two hours;

dipping the UV light-irradiated implant body in an electrolyte solution containing magnesium; and

coating a magnesium titanate oxide film on the dipped implant body by anodic oxidation at a voltage of between 60V to 500V.

18. (Previously Presented) A process for preparing a magnesium titanate oxide film implant as set forth in claim 1, comprising:

irradiating UV light on the implant body made of titanium or a titanium alloy in distilled water for more than two hours;

dipping the UV light-irradiated implant body in an electrolyte solution containing magnesium, having a pH of between 3.0 to 12.5 and a concentration ranging between 0.01M to 1.0M; and

coating a magnesium titanate oxide film on the dipped implant body by anodic oxidation within a range of between 30 mA/cm2 and 4000 mA/cm2, at a voltage of between 60V to 500V.

19. (Previously Presented) A magnesium titanate oxide film implant as set forth in claim 1, comprised of:

the implant body made of titanium or a titanium alloy being irradiating with UV light in distilled water for more than two hours;

the UV light-irradiated implant body being dipped in an electrolyte solution containing magnesium; and

the magnesium titanate oxide film being coated on the dipped implant body by anodic oxidation at a voltage of between 60V to 500V.

20. (Previously Presented) A magnesium titanate oxide film implant as set forth in claim 1, comprised of:

the implant body made of titanium or a titanium alloy being irradiating with UV light in distilled water for more than two hours;

the UV light-irradiated implant body being dipped in an electrolyte solution containing magnesium, having a pH of between 3.0 to 12.5 and a concentration ranging between 0.01M to 1.0M; and

the magnesium titanate oxide film being coated on the dipped implant body by anodic oxidation within a range of between 30 mA/cm2 and 4000 mA/cm2, at a voltage of between 60V to

500V.